

Notice of Allowability

Application No.

10/065,476

Examiner

Mark Ruthkosky

Applicant(s)

GORBELL, BRIAN

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/12/2004.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☒ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 4/12/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Mark Ruthkosky 6/11/04
Mark Ruthkosky
Primary Patent Examiner
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DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed 4/12/2004 has been placed in the application file, and the information referred to therein has been considered as to the merits.

Drawings

The drawings filed on 10/22/2002 are acceptable subject to correction of the informalities indicated on the attached "Notice of Draftsperson's Patent Drawing Review," PTO-948. In order to avoid abandonment of this application, correction is required in reply to the Office action. The correction will not be held in abeyance.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In claim 1, line 15, please delete the word -ceramic- before the phrase, "cell element."

Following claim 6, change the unnumbered claim to claim 7 and in that claim, change the word "hTe" to -The-.

In claim 7e, renumber the claim to read claim 8 and change the letter “T” to the word –
The-.

In claim 8, renumber the claim to read claim 9 and change the word “Tfuel” to the phrase
-The fuel-.

Allowable Subject Matter

Claims 1-11 are allowed.

The following is an examiner’s statement of reasons for allowance:

The instant claims are to a fuel cell unit comprising a) an upper interconnect including a top plate and a lower plate enclosing a sealed interior chamber and defining an intake and exhaust manifold opening in fluid communication with the chamber wherein the lower plate defines a cell opening; b) a lower interconnect comprising a lower plate and an upper plate enclosing a sealed chamber defining an intake and an exhaust manifold opening in fluid communication with the chamber, wherein the upper plate defines a cell opening; c) a fuel cell cassette comprising a single, planar fuel cell element having an anode surface, a cathode surface and an edge surface, a resilient seal element which contacts both the flat surfaces and the edge surface, and a frame that retains both the seal and ceramic cell element, wherein the fuel cell cassette fits within the upper connect cell opening and mates with the upperconnect to seal the upper chamber and the fuel cell cassette fits within the lower interconnect cell opening and mates with the lower interconnect to seal the lower chamber and d) a seal means disposed between the upper and lower interconnects.

The prior art does not teach a fuel cell with a fuel cell cassette comprising a single, planar fuel cell element having an anode surface, a cathode surface and an edge surface with a resilient seal element which contacts both the flat surfaces and the edge surface, and a frame that retains both the seal and cell element, wherein the fuel cell cassette fits within an upper connect cell opening and mates with the upperconnect to seal the upper chamber and the fuel cell cassette fits within the lower interconnect cell opening and mates with the lower interconnect to seal the lower chamber and includes a seal means disposed between the upper and lower interconnects.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited art does not read upon the instant claims, however, the references include general teachings and relevant features as to the state of the art at the time of the invention.

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 571-272-1291. The examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-6:30.) If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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supervisor, Patrick Ryan can be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free.)

Mark Ruthkosky

Primary Patent Examiner

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Mark Ruthkosky
6/11/04